himself to be seriously ill. That the number of cases among his patrons was no larger was supposedly due to the fact that only occasionally had he personally milked the cows.

During the recent epidemic of foot-and-mouth disease in New England, Dr. E. F. Brush (*Journal of the American Medical Association*, June 20, 1903) found that at Concord, Massachusetts, where 327 cattle had been killed because of the disease, but one owner of the infected animals was a milk peddler, and his was the first herd in which the disease was discovered. Among his customers four persons were found who were ill: An old gentleman and his wife, with slight fever and nausea; their son, with mild aphthæ and herpetic eruption, and a middle-aged woman, with a very sore mouth and characteristic vesicular eruption of aphthæ. At Lawrence he found a family of five children, all of whom had aphthæ after drinking milk supplied by a dealer whose cows were shortly afterward condemned. Four of the children had sore mouth, although not very sick, but the fifth was very ill, with vomiting, diarrhœa, and fever. The tongue and lips were very much swollen and covered with blisters. After four days of sickness, convulsions appeared, but ceased when a change was made to another dealer. A case of the disease in a child, aged thirteen months, is reported by Josias (*Gazette hebdomadaire de Médecine et de Chirurgie*, June 1, 1902), who traced the trouble to a dairy where the disease existed among the cows.

Cigar Stumps and Tuberculosis.—That stumps of cigars that have been smoked by consumptives can transmit tuberculosis immediately after they have been smoked, and even two weeks afterward if they have been kept in a dry place, has been shown by L. Peserico (*Archiv für Hygiene*, xliv. p. 189). If kept in a moist place they lose their infectiveness after about ten days, because it seems that the water dissolves something from the tobacco which destroys the virulence of the tuberculous organisms, although it does not take away their vitality. Examination of cigars as bought in the shops, with respect to the presence of the tubercle bacillus, gave no positive results. The content of germs in cigars and cigarettes shows that these are neither abundant nor very various. Moulds and potato bacilli are first in abundance, then come several species of proteus and pus cocci, the presence of which can explain several purulent affections for which smokers are sometimes inclined to blame their cigars.

Purification of Water in the Field.—The requirements of any quick chemical method of purification of water are, according to Nesfield (*Public Health*, July, 1903, p. 601), certainty of effect; the imparting of no taste to the water; absence of any noxious chemical substances in the water; and adaptability to foreign travel—that is, the agents employed must be easily carried and not prone to change on keeping. By experiment he demonstrated that 0.125 g. of chlorine is sufficient to sterilize, within five minutes, a litre of water infected with broth cultures of B. coli, B. typhosus, and Shiga's dysentery bacillus. After the process of sterilization is completed the free chlorine can be removed by means of commercial sodium sulphite, the resulting compounds being sodium sulphate and hydrochloric acid, the latter in turn becoming neutralized at once by the alkali present in the commercial sulphite. One hundred grams of chlorine will suffice to sterilize 176 gallons of water, and will require 177.46 grams of sulphite for neutralization. The gas can be stored in liquid form in lead-lined iron cylinders having a jet with a very fine capillary canal controlled by a tap. The sulphite may be made into tablets or cakes. For use in water-bottles, tablets containing 1.5 grains of bleaching-powder and 0.5 grain of sodium bicarbonate may be employed. These evolve nascent chlorine when placed in water, and will sterilize a pint of water within ten minutes. The chlorine and its resultant bad taste may be removed by a fourth of a grain of sodium sulphite, which he recommends to be used in the form of tablets coated with a film of gelatin, which will dissolve in ten minutes. The chlorinating and the sulphite tablets may be introduced together, the latter beginning to act when the former has served its purpose, and the water is thus made sterile and tasteless in fifteen minutes.

Disinfectant Properties of Corrosive Sublimate and of Alcohol.—The practical value of corrosive sublimate in solutions of 1 : 1000, 1 : 5000, and 1 : 10,000 has been investigated by HARRINGTON and WALKER (*Boston Medical and Surgical Journal,* April 23, 1903, p. 435), who employed as test objects silk threads impregnated with bouillon cultures of B. typhosus, B. diphtheriæ, staphylococcus pyogenes aureus and albus, and B. coli communis, B. pyocyaneus, and B. anthracis. The threads were used in both the wet and dried state. Following are their conclusions: (1) Different species of pathogenic bacteria and different cultures of the same species vary very greatly in their resistance to the action of corrosive sublimate. (2) With some species resistance is diminished in a remarkable degree by a condition of dryness, so that even the 1 : 10,000 solution can bring about sterility in a very short time. But some species are not materially affected in this respect by dryness. (3) Corrosive sublimate in as weak solution as 1 : 5000 is ineffective against the common pathogenic bacteria, including the pus organisms, when they are moist, excepting after prolonged contact. Since fifteen minutes' contact is not sufficient for the destruction of B. coli communis, B. pyocyaneus, and staphylococcus pyogenes albus in the moist state, or of staphylococcus pyogenes aureus, whether moist or dry, the use of this and of weaker preparations in surgical work and for irrigation and similar purposes should be abandoned. (4) Corrosive sublimate in the 1 : 1000 solution is very slow in its action on some of the commonest of the skin bacteria, and, since under the most favorable conditions more than ten minutes' contact may be necessary for it to kill staphylococcus pyogenes albus, it should not be relied upon to any great extent to insure sterility of the hands or of instruments. The mere dipping of the hands for a few seconds into solutions of this strength can serve no useful purpose, but, on the contrary, can lead to much harm by inducing a false sense of security. In order to produce sterility of the hands through the use of this preparation, absolute dryness of the bacteria present would be essential; but a condition of the skin which would insure such dryness would also insure the bacteria not on the very surface against contact with the poison. (5) Corrosive sublimate in any of the strengths commonly employed is a much overrated disinfectant, and under